ancy-210-lab6

August 26, 2023

LAB 6

2347210

DOMAIN: Netflix Movie Recommendation System

1 Write a program using the Regular Exception and create a function that accepts a string and searches it for a valid phone number.

Return the phone number if found.

[1]:
```
import re
```

[19]:
```
def numbersearch(text):
    #in the pattern, \b indicates boundary between a word character(letter/
 ↪char) and a non-word character(digits/special symbols). used to ensure that␣
 ↪it is not part of a bigger string.
    #\d (short-hand character) matches any digits (0-9). \d{3} matches 3␣
 ↪digits, - matches the hyphens in between and this \d{3} format is continued␣
 ↪for the pattern.
    pattern1 = r"\b\d{3}-\d{3}-\d{4}\b"
    phone_numbers = re.findall(pattern1, text)
    return phone_numbers
```

[20]:
```
textin=input("Enter the string: ")
phone=numbersearch(textin)
print(phone)
```

```
Enter the string: Hi Jenny 879-485-9878
['879-485-9878']
```

2 . Write a function that employs regular expressions to ensure the password given to the function is strong.

A strong password is defined as follows:

· at least eight characters long

- contains one uppercase character
- contains one lowercase character
- has at least one digit
- has at least one special character

[For instance: Christ@123]

[21]:
```
def passwordstrength(password):
    pattern = r"^(?=.*\d)(?=.*[a-z])(?=.*[A-Z]).{8,}$"
    match = re.match(pattern, password)
    return bool(match)
```

[26]:
```
password=input("Enter your password: ")
if(passwordstrength(password)==True):
    print("Your password is strong!")
else:
    print("Weak password! Please change.")
```

```
Enter your password: Christ@123
Your password is strong!
```